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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,712	03/11/2005	Dmitry S. Gembitsky	D6424PCT	4712
7590 Benjamin Adler Adler & Associates 8011 Candle Lane Houston, TX 77071			EXAMINER YANG, NELSON C	
			ART UNIT	PAPER NUMBER
			1641	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/06/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/521,712	<b>Applicant(s)</b> GEMBITSKY ET AL.	
	<b>Examiner</b> Nelson Yang	<b>Art Unit</b> 1641	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 22-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election without traverse of claims 1-21 in the reply filed on December 04, 2006 is acknowledged.
2. Claims 22-32 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 04, 2006.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 6, 10, rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. With respect to claim 6, it is unclear if the limitation would have any patentable weight if only one affinity reagent was applied to the array.
6. With respect to claim 10, it is unclear if that if the first detectable affinity reagents are labeled with a secondary detectable affinity reagent, if there would actually be one affinity reagent, or two. Furthermore, it is unclear if it is the second detectable affinity reagent that would render the first affinity reagent detectable.

*Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Wagner et al.  
[US 6,630,358].

With respect to claim 1, Wagner et al. teach arrays of protein capture agents for use in immunoassays (column 26, lines 48-53). More specifically, Wagner et al. teach delivering a sample to the protein array comprising the proteins to be screened and detecting for the presence or amount of the protein that is retained at each patch (column 28, lines 40-55). Wagner et al. further teach that the detection may be done by exposing the patches to a labeled developing agent capable of binding to the analyte (column 26, lines 65-67).

9. With respect to claims 2, 3, Wagner et al. teach a competitive assay wherein a labeled analyte bind to the array (column 26, lines 55-60). Therefore, in this method, the proteins would first be labeled prior to binding to the array.

10. With respect to claim 4, Wagner et al. teach exposing a labeled developing agent capable of binding to the analyte that has already been bound (column 26, lines 63-67).

11. With respect to claim 5, Wagner et al. teach dual labels wherein the protein is labeled with one label, and a second developing agent is labeled with a second label (column 27, lines 1-10). Therefore, the labels are detectable distinct from each other.

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12. With respect to claim 6, Wagner et al. teach that the labels may be added separately such that an immobilized protein is labeled with one label, and a second developing agent is labeled with a second label (column 27, lines 1-10).

13. With respect to claim 7, Wagner et al. teach that the protein capture agents may be antibody fragments (column 25, lines 1-5).

14. With respect to claim 8, Wagner et al. teach that the labeled developing agent may be a labeled antibody (column 27, lines 1-5).

15. With respect to claim 9, Wagner et al. teach that the labeled developing agent may be a labeled antibody (column 27, lines 1-5).

16. With respect to claims 10, 11, Wagner et al. teach that the labeled developing agent may be a labeled antibody (column 27, lines 1-5). The label would thus be a first affinity reagent and the antibody a secondary detectable affinity reagent.

17. With respect to claims 12, 16, Wagner et al. teach arrays of protein capture agents for use in immunoassays (column 26, lines 48-53). More specifically, Wagner et al. teach delivering a sample to the protein array comprising the proteins to be screened and detecting for the presence or amount of the protein that is retained at each patch (column 28, lines 40-55). Wagner et al. further teach that the detection may be done by exposing the patches to a labeled developing agent capable of binding to the analyte (column 26, lines 65-67). More specifically, Wagner et al. teach labeling three different peptide aldehyde inhibitors fluorescently (column 31, lines 58-65), mixing the labeled inhibitors, then adding the mixture onto an array and measuring the fluorescence intensity (column 32, lines 5-11). The proteins immobilized may be reflective of the extent of post-translational modifications (column 21, lines 19-650). Since the amount of

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fluorescence at each particular patch is measured (column 28, lines 54-60), the ratios and relative amounts of bound proteins would be calculated.

18. With respect to claim 13, Wagner et al. teach that the protein capture agents may be antibody fragments (column 25, lines 1-5).

19. With respect to claim 14, Wagner et al. teach that the affinity reagent may be labeled antibodies (column 27, lines 45-65).

20. With respect to claim 15, Wagner et al. teach that the labels may comprise fluorescent methods, which would require fluorophores (column 27, lines 5-10).

21. With respect to claims 17, 18, Wagner et al. teach that the protein capture agents may be antibody fragments (column 25, lines 1-5).

22. With respect to claim 19, Wagner et al. teach arrays of protein capture agents for use in immunoassays (column 26, lines 48-53). More specifically, Wagner et al. teach delivering a sample to the protein array comprising the proteins to be screened and detecting for the presence or amount of the protein that is retained at each patch (column 28, lines 40-55). Wagner et al. further teach that the detection may be done by exposing the patches to a labeled developing agent capable of binding to the analyte (column 26, lines 65-67). More specifically, Wagner et al. teach labeling three different peptide aldehyde inhibitors fluorescently (column 31, lines 58-65), mixing the labeled inhibitors, then adding the mixture onto an array and measuring the fluorescence intensity (column 32, lines 5-11). With respect to claim 6, Wagner et al. teach that the labels may be added separately such that an immobilized protein is labeled with one label, and a second developing agent is labeled with a second label (column 27, lines 1-10). Since the

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amount of fluorescence at each particular patch is measured (column 28, lines 54-60), the ratios and relative amounts of bound proteins would be calculated.

23. With respect to claim 20, Wagner et al. teach that the protein capture agents may be antibody fragments (column 25, lines 1-5).

24. With respect to claim 21, Wagner et al. teach that the developing agent may be labeled antibodies (column 27, lines 1-5).

### ***Conclusion***

25. No claims are allowed.


26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson Yang whose telephone number is (571) 272-0826. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long V. Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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27. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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